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Cont

computer at least one of shuts off the voltage source, discharges the piezoelectric actuator, and produces a warning signal.

REMARKS

Claims 1 to 11 are now pending.

Claim 11 was rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

Claim 11 has been rewritten to better clarify that claim for the Examiner. Approval is respectfully requested. In particular, claim 11 has been rewritten to better indicate that the at least one switch is connected in series with the voltage source and a piezoelectric actuator. Furthermore, as recited in claim 11, the measurement unit detects a voltage across at least one of the piezoelectric actuator and a supply lead of the piezoelectric actuator. The program-controlled computer is related to the overall function of the device, since it generates a voltage difference to a predefined threshold. When a value of the predefined threshold is exceeded, the program-controlled computer either shuts off the voltage source or discharges the piezoelectric actuator and produces a warning signal. It is believed that claim 11 (as presented) plainly obviates the indefiniteness rejection.

Claims 1-4 and 9-11 were rejected under 35 U.S.C. 102(a) (102(e) apparently intended) as anticipated by U.S. Patent No. 6,275,765 to Divljakovic et al. ("the Divljakovic 765 reference") or in the alternative by U.S. Patent No. 6,285,947 to Divljakovic et al. ("the Divljakovic 947 reference") or U.S. Patent No. 6,380,659 to Rueger ("the Rueger reference").

Claim 1 recites a method for detecting a fault current across one of a piezoelectric actuator of an injector and a high voltage supply lead thereof, including the steps of: causing a control device to activate a plurality of switches; in order to control a quantity of fuel injected, causing the plurality of switches to one of charge and discharge the piezoelectric actuator from a voltage supply to a *predefined voltage*; *monitoring the predefined voltage* across at least one of the piezoelectric actuator and the high voltage supply lead *in a time period in which the piezoelectric actuator is charged*; *determining the change in the predefined voltage*; and reporting a fault *when the change in the predefined voltage exceeds a predefined threshold*. (Emphasis added).

The claimed subject matter relates to a method and device for detecting a fault current across a piezoelectric actuator of an injector or its high voltage supply lead. By monitoring the voltage or variation across the charged actuator, even a relatively small fault current can